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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/183,715	10/30/1998	VINCENTZIO I. ROMAN	500.709US1	3436

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EXAMINER

TRAN, CONGVAN

ART UNIT

PAPER NUMBER

2683

DATE MAILED: 06/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/183,715	Applicant(s) ROMAN, VINCENTZIO I.	
	Examiner Congvan Tran	Art Unit 2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed Feb. 06, 2002 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., " Claims 1 and 12 are direct to a communication system wherein adjacent portions of communication areas of different communication circuits use the same polirization).

Respect to claims 1 and 12, Examiner respectfully travers this argument because the Bossard does teach "adjacent portions of communication areas of different communication circuits use the same polirization" see fig.4, cells 410 and 420 (AH, DV) col.7, lines 35-39. Examiner reads the reference with broadest reasonable interpretation. Therefore, the rejection is proper.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Claim 21 is direct to dividing a region into communication areas that include a communication circuit, wherein a first portion of each communication area communicates with a first polarization and the a second portion of the communication area communicates with a second polarization such that adjacent portions of communication areas of different communication circuit use the same polarization).

Respect to claim 21, Examiner respectfully traverses this argument because the Bossard does teach dividing a region into communication areas that include a

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communication circuit (see fig.4, cells 410, 420), wherein a first portion of each communication area communicates with a first polarization (see cell 410, AH) and the a second portion of the communication area communicates with a second polarization (see cell 410, DV) such that adjacent portions of communication areas of different communication circuit use the same polarization (see cells 410, sector 413, AH, DV, 421, sector 423, AH, DV). With reasons above the rejection is proper.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., " Claim 31 is direct to forming boundaries between communication regions with communication circuits wherein a first region communicates with first polarization and adjacent region communicates with second polarization).

Respect to claim 31, Examiner respectfully traverses this argument because the Bossard does teach forming boundaries between communication regions with communication circuits (see fig.4, cells 410 and 420) wherein a first region communicates with first polarization (see fig.4, sector 413, AH) and adjacent region communicates with second polarization (see fig.4, sector 433, AH). With reasons above the rejection is proper.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

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by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Bossard et al (5,949,793).

Regarding claims 1-2, 12, 15, 21-22, 31, 34, 46, Bossard et al. disclose a transmission of digital and analog signals in the same band comprising a number of communication circuits disposed to divide a region in to communication areas (see fig.4, elements 410, 413 and its description); wherein each communication circuit communicates using a first polarization in a first portion of its communication area and communicates using a second, different polarization in a second portion of its communication area (see fig.4 elements 410, AV, DH AH, DV and its description); wherein adjacent portions of communication areas between different communication circuits use the same polarization (see fig.4, element 410, 413, 420, 423, col.7, lines 35-39 and its description).

Regarding claims 3-4, 13-14, 23-24, 32-33, 41-42, 47-48, Bossard et al. further disclose the first polarization comprises horizontal and the second is vertical horizontal (see fig.4, cell 410 and its description).

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Regarding claims 5, 25, 49, Bossard et al. further disclose the first and second portion of each communication area, comprises approximately one half of the communication area (see fig.4, elements 410, 413 and its description).

Regarding claims 6-7, 16, 26, 35, 43, 50-51, Bossard et al. further disclose a numbers of sectors within each communication area, each sector communicating on a subband of a frequency spectrum (see fig.4, and abstract).

Regarding claims 8-11, 17-20, 27-30, 36-39, 52-54, Bossard et al. further disclose the first and second portions of communication area are divided along the number of boundaries of the sectors and each communication circuit transmits signal using a first and second polarization (see fig.4 and its description).

Regarding claim 40, Bossard et al. disclose a transmission of digital and analog signals in the same band comprising forming a number of communication areas, each area including a communication circuit, each communication circuit communicating using first polarization in a first portion of each communication area and a second polarization in a second portion of each communication area (see fig.4, cell 410, 420, AH, DV, AV, DH, col.7, lines 20-40 and its description); forming a number of communication regions of either the first portion or second polarization wherein adjacent portions of communication areas between different communication circuit use the same polarization (see fig.4, element 410, 413, 420, 423, col.7, lines 35-39 and its description); and forming a number of sector within each communication area, where the first and second portions of the communication area are divided along a number of

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boundaries of the sectors, each sector communicating on a different subband of frequency spectrum (see fig.4, col.1, lines 7-12 and abstract).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Congvan Tran whose telephone number is 703-305-4024. The examiner can normally be reached on monday-thursday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703 872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Congvan Tran
Examiner
Art Unit 2683

CT
June 2, 2002



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600